



HF Happenings

Volume 14, Issue 27

No 704

the week of 9 May 2016

You can now download your copy of HF Happenings from www.sarl.org.za/hf_happenings.asp.

ZS3 Sprint

The ZS3 Sprint will be on the air from 14:00 to 15:00 UTC on Sunday 15 May and you have an opportunity to make phone and CW contacts with radio amateurs in the Northern Cape. The exchange is RS(T) and provincial or country abbreviation. Activity will take place between 7 000 to 7 040 kHz for CW and 7 063 to 7 100 and 7 130 to 7 200 kHz for phone. Contacts with stations in ZS3 are worth 2 points and all other contacts are worth 1 point. Contacts with the Northern Cape ARC, ZS3NC, Namaqualand Aero Sport Association, ZS3FLY, the Kalahari Karoo ARC, ZS3ARK, and the Sutherland ARC, ZS3OBS, are worth 5 points each. Only one contact per station is allowed. Logs, labelled "your call sign ZS3 Sprint," must be sent by e-mail to zs3nc@qsl.net by 22 May 2016. The 2016 Blue Book contains all the details.

Autumn QRP Sprint

The results of the Autumn QRP contest held on 9 April 2016 are as follows:

- 1st The Hammies ARC, ZS6ZU - 410 points
- 2nd The West Rand ARC, ZS6WR - 270 points
- 3rd The Pretoria ARC, ZS6PTA - 186 points
- 4th Johan van Zijl, ZS4DZ - 125 points
- 5th Tienie Herbst, ZS6MHH - 96 points

Congratulations to the Hammies. The youngsters are really giving the "Big Guns" a run for their money. Once again, the log submissions were pathetic.

Museum Weekends

The International Museums Weekends are 18 and 19 June and then 25 and 26 June. Registration is now open at www.radio-amateur-events.org

Ooooooops!

CERN's Large Hadron Collider went into standby mode after an electrical transformer suffered a short circuit at the end of April. A small wild animal, believed to be a weasel, had been gnawing on a power cable. Sadly, the weasel did not survive the event, but the LHC should be back online soon. The power outage came just as the LHC was preparing to resume collecting data.



The report does not state if the deceased weasel was of French or Swiss extraction!!

DXCC News

Dave, NN1N, ARRL Membership and Volunteer Programs Manager/DXAC Staff Liaison/Field Services and Radiosport, reports that the following has been approved for DXCC credit. 5A1AL - Libya, all operations are good

[Thanks Tjerk, ZS6P]



South African Radio League * Suid-Afrikaanse Radioliga
Member Society of the International Amateur Radio Union since 1925



Whaddon: Secret life of village that helped crack WW2 code

On 9 May 2016, Milton Keynes Amateur Radio Society members operated GB1SOE to establish contact with French special event station TM75SOE using WWII equipment. This was to commemorate the 75th anniversary of the first transmission sent back to Whaddon Hall, Buckinghamshire, by Special Operations Executive (SOE) agent Georges Begue. They operated from Whaddon Hall during Monday using a replica MK III transmitter and HRO receiver on the French side a WW II B2 spy set was used.

The BBC report: The code breakers at Bletchley Park are well known for their top-secret work, which helped to change the course of the World War 2. However, the Buckinghamshire village of Whaddon, just a few miles down the road, has long been forgotten, despite the vital role it played. It was codenamed Section 8 and was a satellite station for Bletchley Park. It is hoped a new memorial will give it its rightful place in history.

Watch the BBC TV report on the commemoration at Whaddon www.bbc.co.uk/news/uk-36245666. A shorter version of the BBC report is at <http://www.bbc.co.uk/news/uk-36248874>. Further information in the QRZ.com entries for TM75SOE and GB1SOE

May

- 1 - Worker's Day
- 2 - Public Holiday
- 5 - Ascension Day
- 7 and 8 - AWA Valve QSO Party
- 8 - Mother's Day; SARL Youth Net at 15:00 UTC on 7 070
- 15 - ZS3 Sprint
- 19 - Radio Amateur Examination
- 20 to 22 - SARL National Convention, Sasolburg
- 20 to 22 - Dayton Hamvention
- 23 - Closing date for June Radio ZS articles
- 25 - Africa Day
- 29 - SARL Digital Contest

June

- 5 - World Environmental Day
- 6 - Start of Ramadan
- 8 - World Oceans Day
- 12 - Hammies ZS6 Sprint; SARL Youth Net
- 16 Youth Day
- 17 World QRP Day
- 19 Father's Day
- 20 Winter Solstice
- 21 closing date for July Radio ZS articles
- 23 to 27 - SARL Top Band QSO Party
- 24 to 26 - Ham Radio 2016, Friedrichshafen, Germany

Long Delayed Echo detection automated

Murray Greenman, ZL1BPU, has announced the release of a new version of FSQPlot, which now screens spots for Long Delayed Echoes. These are much disputed and rarely observed unusual echoes of transmissions from unknown sources. They have been observed on all bands, but mostly on CW, but should be detectable using FSQCall soundings. The signal delay is reportedly from two to 20 seconds.

FSQPlot is a helper program which operates with FSQCall, allowing the user to see in a graphical manner what the signal-to-noise ratio has been for specified stations on a 24 hour basis. It makes use of the FSQCall Heard Log, and now, in addition to portraying activity, FSQPlot now screens the log for all LDEs.

FSQCall is an amazing chat-style digital mode, popularly used as a way to keep in touch with ham friends without them needing to be in the shack or at the radio all the time. Messages are sent rather like text messages, in simple sentences, but by HF radio rather than via phone. FSQCall, in Directed Mode, records all verified receptions in a log, along with their signal report.

As a result, it may also log echoes as close as about 6 sec from your own transmissions, and even closer from other stations. Because LDE echoes can be just a few seconds delayed, they are best detected on short transmissions, such as FSQ soundings.

To participate in the worldwide search for LDEs, you need to first install ZL2AFP FSQCall V0.32 and operate it in Selective Calling (Directed) mode on one of the established calling frequencies. These frequencies are listed on the Rules tab within the program. Set the sounding interval to 30 minutes, and Sounding ON.

Then install FSQPlot V0.06 (which generates a graph of activity on the channel over 24 hours), and have it monitor the FSQCall Heardlog file. The more stations we have actively sounding and listening, the greater the chance of catching a real LDE. LDE detection reports and questions regarding FSQCall and FSQPlot should be directed to zl1bpu@gmail.com.

Download both programs mentioned above from www.qsl.net/zl1bpu/MFSK/FSQweb.htm.

Northern Ireland lighthouse scores 200th entry

The Haulbowline Lighthouse in Northern Ireland built in 1824 is this year's prestigious 200th registration in the International Lighthouse and Lightship Weekend. The annual fun-event began in 1995 and is always held on the third weekend of August.

Members of the Hilltop Amateur Radio Club in County Down, mainly operate portable, and have chosen the Haulbowline Lighthouse. The 34 metre high unpainted granite tower is on wave-washed rock, exposed only at low tide with a 'half tide' light for ships entering from the Irish Sea, showing that the tide was high enough for vessels to enter. Listen for its call sign in clever phonetics - Mike November Zero Hilltop Never Quiet.



In the registrations leader board is Germany on 40, USA with 40, Australia 29, England 14 and Scotland 12 in nearly 30 countries so far. To see them all, to register a marine navigation structure under simple guidelines on August 20 and 21, visit the website illw.net

I see that three South African lighthouses appear in the listings.



African DX

Africa DX Net - every Saturday afternoon from 14:00 UTC on 14,260 MHz hosted by Mike, V51MA, Leon, A25SL, and Tinus, ZS6MHK.

Republic of the Congo, TN. Philippe, F5MVB, and Joel, F5AOW will be active as TN2MP and TN2BJ, respectively, from Brazzaville between 15 and 23 May. Activity will be on 20 to 10 meters, possibly 40/30 m (if there is enough space) and using CW and SSB. QSL via their home call signs, direct or by the Bureau. Log will be uploaded to ClubLog after their return home



in France.

Democratic Republic of the Congo, 9Q. Fernando, EA4BB, is expected to be active again (possibly as 9Q6BB) from Kinshasa for up to 3 years. He is in the DRC awaiting confirmation on his call sign. Look for more information to be forthcoming.

African Islands

IOTA frequencies

CW: 28 040 24 920 21 040 18 098 14 040 10 114 7 030 3 530 kHz

SSB: 28 560 28 460 24 950 21 260 18 128 14 260 7 055 3 760 kHz



Chagos Islands, VQ9. Randy, WW6RG, is expected once again to be active as VQ9RA from Diego Garcia [BIOT] (AF-006) later this month (25 to 30 May). Activity will be QRP, sporadic and when time permits on 20, 17 and 15 metres using SSB. He provided the following schedule - 25 May - 12:00 to 16:30 UTC; 26 May - 04:00 to 09:00 UTC and 30 May - 15:00 to 17:30 UTC.

He uses a Yaesu FT-817nd (w/5 w) with a EARCHI 35' end fed wire antenna and a small ALEX-Loop Magnetic loop. QSL via his home call sign.

Canary Islands, EA8. Flavio, IW2NEF, will be active as EA8/IW2NEF from Fuerteventura Island (AF-004) between 11 and 25 July. Activity will be holiday style on the HF bands. QSL via IK2DUW.



VK stations get to use AX prefix for World Telecommunications Day

The International Telecommunications Union, or ITU, is an international organisation established to standardise radio and telecommunications. The ITU was founded as the International Telegraph Union in Paris on 17 May 1865 and is the world's oldest international organisation. 17 May, that is next Tuesday, is celebrated annually as World Telecommunication Day.

The Wireless Institute of Australia has a long standing agreement with the regulator, the Australian Communications and Media Authority, that the alternative AX prefix is available for the period 00:01 to 23:59 hours local time on 17 May to mark World Telecommunication Day. The WIA recommends that those who use the AX prefix do so with an appropriate QSL card, especially to meet the needs of award and prefix hunters.

Contest Calendar

This week's contests as compiled by Bruce Horn, WA7BNM. The period covered is 9 to 16 May 2016

Phone Fray
02:30 - 03:00 UTC 11 May
Mode: SSB
Bands: 160, 80, 40, 20, 15 m

Classes: Single Op
Max power: 100 watts
Exchange: NA: Name and state, province or country; non-NA: Name

Work stations: Once per band
QSO Points: NA station: 1 point per QSO;
non-NA station: 1 point per QSO with an NA
station
Multipliers: Each US state (including
KH6/KL7) once per band; Each VE prov-
ince/territory once per band; Each North
American country (except W/VE) once per
band
Score Calculation: Total score = total QSO
points x total mults
Submit logs by: 03:00 UTC 13 May 2016
E-mail logs to: (none)
Post log summary at:
<http://www.3830scores.com>
Mail logs to: (none)
Find rules at:
[http://www.perluma.com/Phone_Fray_Contes
t_Rules.pdf](http://www.perluma.com/Phone_Fray_Contes_t_Rules.pdf)

CWops Mini-CWT Test
13:00 - 14:00 UTC and 19:00 - 20:00 UTC 11
May and 03:00 - 04:00 UTC 12 May
Mode: CW
Bands: 160, 80, 40, 20, 15, 10 m
Classes: Single Op - QRP, low or high
Max power: HP: >100 watts; LP: 100 watts;
QRP: 5 watts
Exchange: Member: Name and member no;
non-Member: Name and state, province or
country
Work stations: Once per band
QSO Points: 1 point per QSO
Multipliers: Each call once
Score Calculation: Total score = total QSO
points x total mults
Submit logs by: 04:00 UTC 14 May 2016
Post log summary at:
<http://www.3830scores.com>
Mail logs to: (none)
Find rules at:
<http://www.cwops.org/cwt.html>

RSGB 80 m Club Championship, Data
19:00 - 20:30 UTC 11 May
Mode: RTTY, PSK
Bands: 80 m Only
Classes: (none)
Exchange: RST and serial no
QSO Points: 1 point per QSO

Multipliers: (none)
Score Calculation: (see rules)
Submit logs by: 23:59 UTC 18 May 2016
Upload log at: [http://www.vhfcc.org/cgi-
bin/hfenter.pl](http://www.vhfcc.org/cgi-bin/hfenter.pl)
Mail logs to: (none)
Find rules at:
[http://www.rsgbcc.org/hf/rules/2016/r80
mcc.shtml](http://www.rsgbcc.org/hf/rules/2016/r80mcc.shtml)

NAQCC CW Sprint
00:30 - 02:30 UTC 12 May
Mode: CW
Bands: 80, 40, 20 m
Classes: (none)
Max power: 5 watts
Exchange: RST, state, province or country
and NAQCC no or power
Work stations: Once per band
QSO Points: 1 point per QSO with non-
member; 2 points per QSO with member
Multipliers: Each state, province or country
once
Key Type Mult: 2 x if straight key, 1,5 x if
bug, 1 x if other
Score Calculation: Total score = total QSO
points x total mults x key type mult
Submit logs by: 23:59 UTC 15 May 2016
Upload log at:
<http://naqcc.info/sprintlog.html>
Mail logs to: John Shannon, K3WWP, 478 E.
High St., Kittanning, PA 16201, USA
Find rules at:
<http://naqcc.info/sprint201605.html>

NCCC RTTY Sprint: 01:45 UTC-02:15 UTC 13
May
Mode: RTTY
Bands: (see rules)
Classes: (none)
Exchange: Serial no, name and QTH
Score Calculation: Total score = total QSO
points x total mults
Submit logs by: 15 May 2016
E-mail logs to: (none)
Post log summary at:
<http://www.3830scores.com/>
Mail logs to: (none)
Find rules at:
<http://www.ncccsprint.com/rttyns.html>

NCCC Sprint

02:30 - 03:00 UTC 13 May

Mode: CW

Bands: (see rules)

Classes: (none)

Exchange: Serial no, name and QTH

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 15 May 2016

E-mail logs to: (none)

Post log summary at:

<http://www.3830scores.com/>

Mail logs to: (none)

Find rules at:

<http://www.ncccsprint.com/rules.html>

HPC World Wide DX Contest

12:00 UTC 14 May to 11:59 UTC 15 May

Mode: BPSK63

Bands: 80, 40, 20, 15, 10 m

Classes: Single Op - QRP or high; Multi-Op; SWL

Max power: HP: 100 watts; QRP: 5 watts

Exchange: HPC Members: RST and 3-digit HPC member number; non-HPC: RST and 3-digit QSO no

QSO Points: (see rules)

Multipliers: Each HPC member once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 15 June 2016

E-mail logs to: contest2013@pskclub.gr

Mail logs to: (none)

Find rules at: <http://pskclub.gr/contest>

CQ-M International DX Contest

12:00 UTC 14 May to 11:59 UTC 15 May

Mode: CW, SSB

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Op Single Band - CW, SSB or mixed; Single Op All Band - CW, SSB or mixed - low or high; Single Op All Band QRP; Multi-Single; SWL; World War II Veteran
Max power: HP: >100 watts; LP: 100 watts; QRP: 5 watts

Exchange: RS(T) and serial no

QSO Points: (see rules)

Multipliers: Each RS-150-C country once per band

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 15 June 2016

E-mail logs to: cq-m@cq-m.ru

Mail logs to: (none)

Find rules at: [http://www.cq-](http://www.cq-m.ru/en/rules/149-60th-cq-m.html)

[m.ru/en/rules/149-60th-cq-m.html](http://www.cq-m.ru/en/rules/149-60th-cq-m.html)

VOLTA WW RTTY Contest

12:00 UTC 14 May to 12:00 UTC 15 May

Mode: RTTY

Bands: 80, 40, 20, 15, 10 m

Classes: Single Op All Band; Single Op Single Band; Multi-Op; SWL

Exchange: RST, QSO no and CQ Zone

Work stations: Once per band

QSO Points: See rules

Multipliers: Each country and

VK/VE/JA/ZL/W call area (see rules) once per band; Each country on a different continent worked on at least 4 bands once (extra mult)

Score Calculation: Total score = total QSO points x total mults x total QSOs

Submit logs by: 31 May 2016

E-mail logs to: log2016@contestvolta.it

Mail logs to: (none)

Find rules at:

<http://www.contestvolta.com/rules.pdf>

Arkansas QSO Party

14:00 UTC 14 May to 02:00 UTC 15 May

Mode: CW, Phone, Digital

Bands: 80, 40, 20, 15, 10, 2 m

Classes: Single Op - SSB or mixed - QRP, low or high; Single Op CW - low or high;

RTTY/PSK Only; Multi-Single; Multi-Multi;

Single Op Mobile; Multi-Op Mobile; Single Op

Portable; Multi-Op Portable; Single Op Rover; Multi-Op Rover

Max power: HP: >150 watts; LP: 150 watts;

QRP: 10 watts

Exchange: AR: RS(T) and county; non-AR: RS(T) and state, province or "DX"

Work stations: Once per band per mode per county

QSO Points: 1 point per SSB QSO; 2 points per CW QSO; 3 points per digital QSO; Bonus: 200 points per KX5AR or WR5P QSO

Multipliers: AR: Each AR county/state/province once and one "DX"; non-AR: Each AR county once
Score Calculation: Total score = (total QSO points x total mults) and bonus points
Submit logs by: 28 May 2016
E-mail logs to: arkqsoparty@cox.net
Mail logs to: Arkansas QSO Party, c/o Don Banta, K5DB, 3407 Diana St., Springdate, AR 72764, USA
Find rules at: <http://www.arkqsoparty.com/#rules/c205y>

MARAC USA QSO Party
14:00 - 24:00 UTC 14 May and 14:00 - 24:00 UTC 15 May
Mode: CW
Bands: 80, 40, 20, 15, 10 m
Classes: Fixed; Mobile
Exchange: RST and state and county or "DX"
Work stations: Once per band
QSO Points: (see rules)
Multipliers: each US County once
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 30 June 2016
E-mail logs to: w3dya@juno.com
Mail logs to: Norm Beavers, W3DYA, 3320 McMillan Dr., Tyler, TX 75701-8239, USA
Find rules at: <http://countyhunter.com/MARAC%20RULES%202016.htm>

Portuguese Navy Day Contest
15:00 UTC 14 May to 15:00 UTC 15 May
Mode: CW, SSB
Bands: 80, 40, 20, 15, 10 m
Classes: Single Op
Exchange: NRA Club: Member no and CQ Zone; non-member: QSO no and CQ Zone
Work stations: Once per band per mode per 60 minutes
QSO Points: See rules
Multipliers: Each country once per band per mode
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 17 June 2016
E-mail logs to: nra@nra.pt
Mail logs to: (none)

Find rules at: <http://www.nra.pt/portuguese-navy-day-contest---2016.html>

FISTS Spring Unlimited Sprint
17:00 - 21:00 UTC 14 May
Mode: CW
Bands: 80, 40, 20, 15, 10 m
Classes: QRP, QRO, Club
Max power: QRO: 100 watts; QRP: 5 watts
Exchange: FISTS: RST, state, province or country, first name and FISTS no; non-FISTS: RST, state, province or country, first name and power
Work stations: Once per band
QSO Points: 5 points per QSO with FIST member; FIST members: 2 points per QSO with non-FIST member
Multipliers: Each US state and VE province once; Each DXCC country once
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 13 June 2016
E-mail logs to: n2ed@fistsna.org
Mail logs to: (none)
Find rules at: <http://fistsna.org/operating.html#sprints>

WAB 7 MHz Phone
10:00 - 14:00 UTC 15 May
Mode: SSB
Bands: 40 m Only
Classes: Single Op - fixed, mobile or portable; Multi-Op - fixed, mobile or portable;
Low Power; SWL - fixed, mobile or portable
Max power: non-Low: >10 watts; Low: 10 watts
Exchange: British Isles: RS, serial no and WAB square; other: RS, serial no and country
QSO Points: (see rules)
Multipliers: (see rules)
Score Calculation: Total score = total QSO points x total mults
Submit logs by: 5 June 2016
E-mail logs to: g3xkt@worked-all-britain.org.uk
Mail logs to: Tony Beardsley, G3XKT, 14 York Avenue, Sandiacre, Nottingham NG10 5HB, United Kingdom

Find rules at:

<http://wab.intermip.net/Contests.php>

UA2 QSO Party

13:00 UTC-16:59 UTC 15 May

Mode: CW, SSB

Bands: 80, 40, 20 m

Classes: Single Op - CW, SSB or mixed

Multi-Single; Junior Multi-Single; SWL

Exchange: UA2: RS(T) and RDA ID; non-

UA2: RS(T) and serial no

Work stations: Once per band per mode

QSO Points: 1 point per QSO with non-UA2
station; 5 points per QSO with UA2 station

Multipliers: (none)

Score Calculation: Total score = total QSO
points

Submit logs by: 15 June 2016

E-mail logs to: (none)

Upload log at:

http://ua9qcg.com/ru/submit_log.php?lang=en

Mail logs to: (none)

Find rules at:

<http://www.qrz.ru/contest/detail/382.html>

Run for the Bacon QRP Contest

01:00 - 03:00 UTC 16 May

Mode: CW

Bands: 160, 80, 40, 20, 15, 10 m

Classes: Single Band; All Band

Max power: 5 watts

Exchange: RST, state, province or country
and member no or power

Work stations: Once per band

QSO Points: 1 point per QSO with non-
member; 3 points per QSO with member on
same continent; 5 points per QSO with
member on different continent

Multipliers: Each state, province or country
once; Multiply mults by 2 if >50 members
worked

Score Calculation: Total score = total QSO
points x total mults

Submit logs by: 22 May 2016

E-mail logs to: (none)

Upload log at:

<http://grpcontest.com/pigrun/autolog.php>

Mail logs to: (none)

Find rules at: <http://grpcontest.com/pigrun/>

Next Week's Contests

Phone Fray, 02:30 - 03:00 UTC 18 May

CWops Mini-CWT Test, 13:00 - 14:00 UTC, 19:00 - 20:00 UTC 18 May 03:00 - 04:00 UTC 19
May

RSGB 80 m Club Championship, CW, 19:00 - 20:30 UTC 19 May

NCCC RTTY Sprint, 01:45 - 02:15 UTC 20 May

NCCC Sprint, 02:30 - 03:00 UTC 20 May

Slobozhansky Sprint Contest, 18:00 - 19:59 UTC (SSB) and 20:00 - 21:59 UTC 20 May (CW)

UN DX Contest, 06:00 - 21:00 UTC 21 May

NZART Sangster Shield Contest, 08:00 - 11:00 UTC 21 May and 08:00 - 11:00 UTC 22 May

Aegean RTTY Contest, 12:00 UTC 21 May to 12:00 UTC 22 May

EU PSK DX Contest, 12:00 UTC 21 May to 12:00 UTC 22 May

His Majesty the King of Spain CW Contest, 12:00 UTC 21 May to 12:00 UTC 22 May

Feld Hell Sprint, 16:00 - 17:59 UTC and 20:00 - 21:59 UTC 21 May

Baltic Contest, 21:00 UTC 21 May to 02:00 UTC 22 May

VHF Happenings

VK6RIO tests with ZS abandoned!

The VK6RIO Trans-Indian Ocean beacon tests on 144,950 MHz between Australia and South Africa have been abandoned. The lack of local sponsorship and the depreciating Rand have torpedoed this amateur science research project. This Trans-Indian Ocean project was conceived by the Northern Corridor Radio Group and would use chirp modulation based on the chirp radar system invented in Australia. It was hoped that this would achieve the first 144 MHz contact via Tropo Ducting between VK and ZS and contribute to the study of Trans-Indian Ocean propagation conditions.

The following e-mail arrived from Keith Bainbridge, VK6RK, spokesman for the research group at Perth, Western Australia. It reads, "Well Mike we have given up on the ZS hams. As of next week, we will be dismantling your end of the link and selling off the gear. There is an expression here "I am into flagellation, necrophilia and bestiality," i.e. I'm flogging a dead horse. Three years waiting is a bit too long I am afraid. What we intend to do is reprogram the gear with a JT mode and point it to our east and when the guys in the east coast have had enough, we will swing it around your way. Obviously it will not have anywhere near the signal penetration, but hey, no one is interested anyway. I just wish you could have raised the interest level, but I know what hams are like. Thanks for your efforts in the past and best wishes for the future. 73 Keith."

Major Step Forward in Kletsious EPS

The electric power system (EPS) is the sub-system that provides the satellite with power. The sub-system started out as a set of specifications and requirements, which evolved to a basic block diagram. From there a few simple conceptual experiments eventually led to the first prototype. The first prototype was based on 10 V (open-circuit) solar panels, a 2-cell lithium polymer battery and 2 switch mode step-down converters for 3,3 V and 5 V power conditioning. Taking the risk of fire or explosion was somewhat justified by the good energy to weight and power to weight ratio it offered. However, in the meantime a new battery technology has emerged from the laboratory stage to being (fairly) commonly available on the market. This new technology is the lithium iron phosphate (LiFePO₄) battery. Also based on lithium it still offers a fairly high energy to weight but it is inherently much safer and has electrical characteristics that are very similar to the lithium polymer and lithium ion type batteries. Another advantage is the longer expected lifetime of the LiFePO₄ battery.

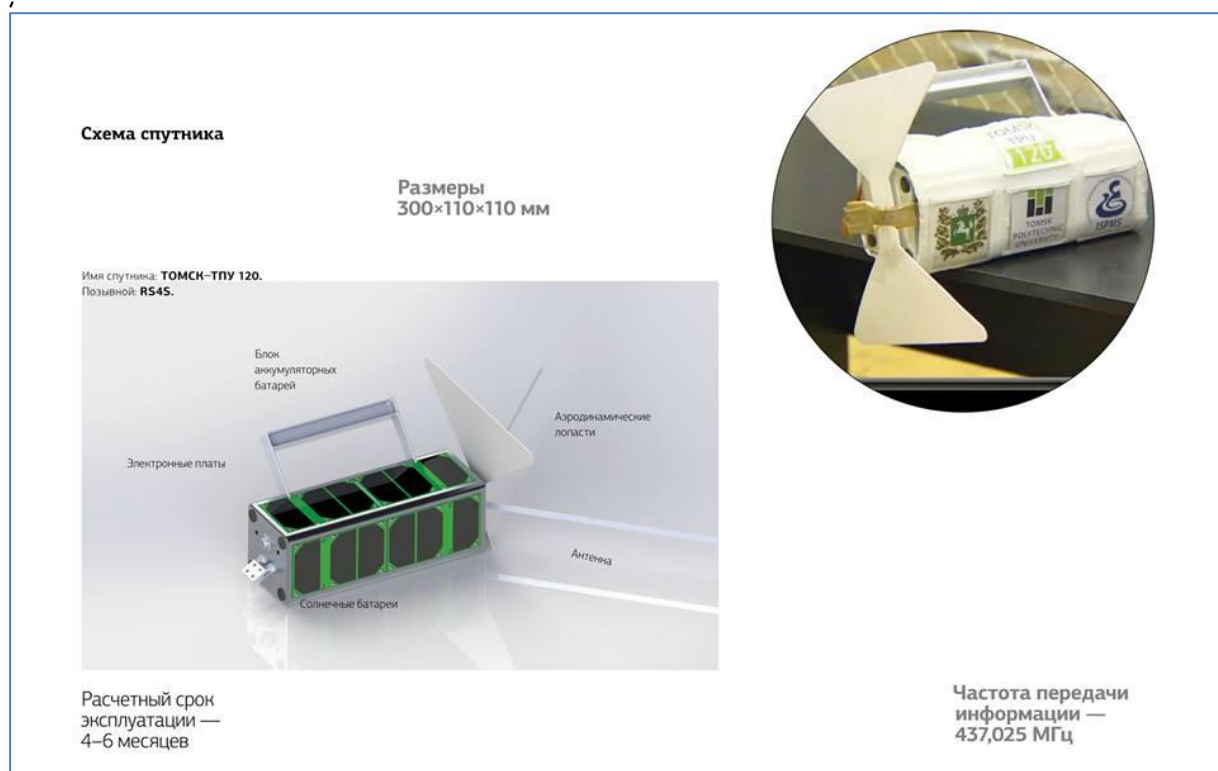
Learn more about Kletsious and other exciting satellite projects at the AMSAT SA Space Symposium in Pretoria on 28 May 2016. Book now to benefit from early bird discounts. Get details on www.amsatsa.org.za.

Tomsk satellite is RS4S

Andy, G0SFJ, says the Tomsk Satellite on board the ISS has a call sign (позывной) of RS4S, according to this picture sent to me today by Serg, RV3DR.

I heard it this morning rebroadcast through the ISS. An EA station managed to repeat his call sign in FM through the system during the pause between greeting messages. EA1ICW has printed the story (my SWL report) at

<http://www.diariodelorientes.es/2016/05/10/Ilanisco-conecta-la-estacion-internacional-espacial/>
He seems to be very pleased! (I had to use google English)



Contests this week

50 MHz Spring Sprint

23:00 UTC 14 May to 03:00 UTC 15 May

Mode: not specified

Bands: 6 m Only

Classes: Single Op; Rover; Rookie

Exchange: 6-character grid square

QSO Points: 1 point per QSO

Multipliers: Each grid square

Score Calculation: Total score = total QSO points x total mults

Submit logs by: 28 May 2016

E-mail logs to: kotoka2kqm@windstream.net

Post log summary at: <http://www.3830scores.com>

Mail logs to: Kent O'Dell, KA2KQM, 2752 Monument Road, Jasper, GA 30143, USA

Find rules at: <https://sites.google.com/site/springvhfupsprints/home/2016-information>

Items used with acknowledgement to the ARRL Letter, the ARRL DX News, the ARRL Contest Update, OPDX Bulletin, 425 DX Bulletin, DXNL Newsletter, WIA-News, the RSGB News, DxCoffee, Southgate ARC News, DX World and the Amateur Radio Newsletter